			D	0420/05 90
umber:	CRF Fors Corrected by	the STIC Syste	Branch CRF Processing	0420/05 90 Date: 2/25/03
	from non-ASCII to ASCII		Edited by: Verified by:	(STIC s
Changed the m	argins in cases where the sequence	e text was "wrapped"	down to the n	ext-line.
	error in the Current Application Dat			-n E U
Edited the Curre applicant was	ent Application Data section with the	e actual current nuthat other	per. The numb	er inputted by the
Added the man	datory heading and subheadings for	r "Current Application	Data".	
Edited the "Num	nber of Sequences" field. The appli	cant spelled out a nu	mber instead 🤅	af using an integer.
Changed the sp	pelling of a mandatory field (the head	dings or subheadings	s), specifically:	-
Corrected the S	EQ ID NO when obviously incorrect	t. The sequence nun	nbers that were	edited were:
nserted or corre	ected a nucleic number at the end o	f a nucleic line. SEC	ID NO's edite	ed:
Corrected subhe	eading placement. All responses m d a response below the subheading,	ust be on the same li this was moved to it	ne as each sul s appropriate p	bheading. If the place.
Inserted colons	after headings/subheadings. Head	lings edited included:		
Deleted extra, i	nvalid, headings used by an applica	nt, specifically:		
Deleted: [, \inc	on-ASCII "garbage" at the beginning bers throughout text;	/end of files; second text, such as	cretary initials/	filename at end of fi
Inserted manda	atory headings, specifically:		·	-
Corrected an o	bvious error in the response, specif	ically:		
Edited identifier	rs where upper case is used but low	ver case is required, o	or vice versa.	·
Corrected an e	rror in the Number of Sequences fie	eld, specifically:		· .
A "Hard Page E	Break" code was inserted by the app	plicant. All occurrenc	es had to be d	eleted.
	stop codon in amino acid sequencen bug). Sequences corrected:			
Other:	Re-aligned amino num	benty.		
		,		

Action. DO NOT send a copy of this form.

3/1/95



OIPE

RAW SEQUENCE LISTING DATE: 02/25/2003 PATENT APPLICATION: US/09/940,316B TIME: 14:18:49

Input Set : N:\jumbos\09940316BDC.txt
Output Set: N:\CRF4\02252003\I940316B.raw

3 <110> APPLICANT: KOSAN BIOSCIENCES, Inc.

```
REEVES, CHRISTOPHER
      5
              CHU, DANIEL
      6
              KHOSLA, CHAITAN
      7
              SANTI, DANIEL
              WU, KAI
     10 <120> TITLE OF INVENTION: POLYKETIDES ENCODING THE fkbA GENE OF THE FK-520 POLYKETIDE
SYNTHASE
              GENE CLUSTER
    11
     13 <130> FILE REFERENCE: 30062-20026.11
     15 <140> CURRENT APPLICATION NUMBER: 09/940,316B
     16 <141> CURRENT FILING DATE: 2001-08-27
     18 <150> PRIOR APPLICATION NUMBER: 09/410,551
     19 <151> PRIOR FILING DATE: 1999-10-01
     21 <150> PRIOR APPLICATION NUMBER: US 60/139,650
     22 <151> PRIOR FILING DATE: 1999-06-17
     24 <150> PRIOR APPLICATION NUMBER: US 60/123,810
     25 <151> PRIOR FILING DATE: 1999-03-11
     27 <150> PRIOR APPLICATION NUMBER: US 60/102,748
     28 <151> PRIOR FILING DATE: 1998-10-02
     30 <160> NUMBER OF SEQ ID NOS: 72
     32 <170> SOFTWARE: FastSEO for Windows Version 4.0
     34 <210> SEQ ID NO: 1
     35 <211> LENGTH: 77536
     36 <212> TYPE: DNA
     37 <213> ORGANISM: Streptomyces hygroscopicus
     39 <220> FEATURE:
     40 <221> NAME/KEY: CDS
     41 <222> LOCATION: (52275)...(71465)
     43 <400> SEQUENCE: 1
                                                                               60
     44 gateteagge atgaagteet eeaggegagg egeegaggtg gtgaacaeet egeegetget
                                                                              120
     45 tgtacqgacc acttcagtca gcggcgattg cggaaccaag tcatccggaa taaagggcgg
                                                                              180
     46 ttacaagatc ctcacattgc gcgaccgcca gcatacgctg agttgcctca gaggcaaacc
     47 gaaagggcgc gggcggtccg caccagggcg gagtacgcga cgagagtggc gcacccgcgc
                                                                              240
                                                                              300
     48 accgtcacct ctctcccccg ccggcgggat gcccggcgtg acacggttgg gctctcctcg
                                                                              360
     49 acgetgaaca eeegegeggt gtggegtegg ggacaeegee tggeategge egggtgaegg
                                                                              420
    50 tacggggagg gcgtacggcg gccgtggctc gtgctcacgg ccgccgggcg gtcatccgtc
                                                                              480
    51 gagacggcac teggegagea gggacgeetg gteggeacet gegggeegga egacegtgtg
                                                                              540
     52 gttcgcgggc gggcggtggc cggtggtgag ccagctctcc agggcggtga aggctgagcg
                                                                              600
     53 gtgacacggc agcaaaggcc ggagtcggtc ggggaaggtg tcgacgaggg cgtcggtgtg
                                                                              660
    54 cgtgccgtcc tcgatgcggt agtagcggta ccggccgcca ggccgctgcc ggacatacgc
                                                                              720
    55 gcgtacacqt cqqaqcccqq qcqqcaqqca qcaqcacqtc qagagtgcct ggatggtgat
                                                                              780
    56 cageggettg cegataegae eggteaaege gatgegttee aeggeegegt ggaegeegga
                                                                              840
    57 ggagegggtg gegtagtegt agteggeate geageeeggg acegteeeeg gggegeaata
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RAW SEQUENCE LISTING PATENT APPLICATION: US/09/940,316B DATE: 02/25/2003 TIME: 14:18:49

Input Set : N:\jumbos\09940316BDC.txt
Output Set: N:\CRF4\02252003\I940316B.raw

58	cggtgtgccg	gcttccttct	ccccatcgaa	gccggggtcg	aactcctcgc	ggtagacgcg	900
59	ctgcgtcaga	tcccagtaga	cctcgtggtg	gtacggccac	aagaactcgg	agtcggccgg	960
				ctggccggct			1020
				gaaggtgaag			1080
				gtcgtacagc			1140
				cccggtgacc			1200
				ggcccgggtc			1260
				gccatcacgg			1320
				gcgggcgagc			1380
67				ggtgccggcc			1440
68				gtcgtggttc			1500
				ctggatcccg			1560
				cgccgggtcg			1620
				ggcctgctga			1680
				cggggcatcg			1740
				cagggtgaga			1800
				aaccatggag			1860
				gtggagacga			1920
				atgacgggcg			1980
				gtccccgggt			2040
				caaggtggtc			2100
				ggtgtaaccg			2160
				ccagcagacg			2220
				cttgccgtcc			2280
				ggtgtccgtg			2340
				gtagtcggtg			2400
				ggtggcggcc			2460
				gccgaagaac			2520
				ggtgctgccg			2580
				cggcacccgg			2640
				ggtggagttc			2700
				ggtccactgg			2760
				gtgccagatg			2820
				ccgcgcccac			2880
				gacgtcggtg			2940
				cggataggtg			3000
				ggtgcgctgg			3060
				cgcggcttcg			3120
				cgcgttgttc			3180
97	cacgagcagg	aagccatagc	ggtccgcgaa	tgagagcagg	ccggagttgt	cggcgtagcc	3240
				gaacaccacc			3300
				gcccgggttc			3360
						gggccgtcgg	3420
						gacgggtgag	3480
						agaggggaa	3540
						cgatgtcgtg	3600
						cccggcaccg	3660
						ccgcgcgatg	3720
						cgaacgcccc	3780

RAW SEQUENCE LISTING DATE: 02/25/2003 PATENT APPLICATION: US/09/940,316B TIME: 14:18:49

Input Set : N:\jumbos\09940316BDC.txt

Output Set: N:\CRF4\02252003\I940316B.raw

				gactcggccg			3840
				gcgggctggg			3900
109	ccagccgcgt	ggggcggccg	cgcccaagtg	cagtacgccg	accgtggccg	gcgggagggc	3960
110	cggaccggtc	agtgcagtcc	cgcggccctg	cgggaccgct	cgtcccagac	gggttccacc	4020
111	gcggcgaacc	ggggtccgtg	tccgcggcgg	tagaccatca	gtgtccgctc	gaaggtgatg	4080
112	acgatgacac	cgtcctggtt	gtagccgatg	gtgcgcacgc	tgatgatgcc	tacgtcaggt	4140
113	cggctggcgg	actcccgggt	gttcaggacc	tcggactgcg	agtagatggt	gtcgccctcg	4200
114	aagaccgggt	tcggcagcct	gacccggtcc	cagccgaggt	tggccatcac	atgctgggag	4260
115	atgtcggtga	cgctctgccc	ggtgaccagg	gcgagggtga	aggtggagtc	caccagcggc	4320
116	ttgccccagg	tggtgcccgc	cgagtagtgg	cggtcgaagt	gcagcggcgc	ggtgttctgc	4380
117	gtcaggagcg	tgagccagga	gttgtcggtc	tccaggaccg	tgcggcccag	ggggtggcgg	4440
118	tacacgtcgc	cggtggtgaa	gtcctcgaag	tagcggccct	gccagccctc	gaccacagcg	4500
119	gtgcgggtgg	cgtcctggtc	cgggttctca	gtcgtcatgg	cgctcattct	gggaagtccc	4560
				gggctcatac			4620
				ctggcgcgcg			4680
				cgtcgagcgg			4740
				cgacggccac			4800
124				ccaggacgac			4860
125				gtccgaagac			4920
126				ggcggcgtct			4980
127				gtggtgtcca		-	5040
128				tgctgttgcg			5100
129				tgccgggagc			5160
130				agtgcaggaa			5220
				gctcggcgcc			5280
				acttgttgag			5340
				ccagccgccg			5400
				tcgtcacgtg			5460
				agggactata			5520
				ggcggcccac			5580
				cgcatcctcg			5640
				ctttggagca			5700
				gtgtcatcaa			5760
				tgcgtggcat			5820
				atgtgcgctc			5880
				tggtgcagaa			5940
				gcggagccac			6000
				ccgcggaccg			6060
				ccggcacccc			6120
				tgtacgcgta			6180
				cgcagttgga			6240
				acacgcgcta			6300
				cctacggccc			6360
				gggagtgggc			6420
				gcttttccgg			6480
				aggtgacggg			6540
				cctacgcacg			6600
				gacgctgggc			6660
				ccttccacgg			6720
100	guguugu	gggcccgacc	cccccyycca	coccocacyy	uguguacuug	-33-33-133	0,20

RAW SEQUENCE LISTING DATE: 02/25/2003 PATENT APPLICATION: US/09/940,316B TIME: 14:18:49

Input Set : N:\jumbos\09940316BDC.txt
Output Set: N:\CRF4\02252003\I940316B.raw

156	gccgggtccc	ggagctgggc	gagcataccg	agtccgtcct	ggcgtggctg	gccgcgcccc	6780
157	acagcgccga	ccgcgaagag	gccggccatg	ccgaatgaac	tcaccggagt	cctgatcctg	6840
158	gccgccgtgt	tcctgctcgc	cggcgtacgg	gggctgaaca	tgggcctgct	cgcgctggtc	6900
			ggtcgcactc				6960
			ggtgctggtc				7020
			gctggtacgt				7080
			cttcggcctg				7140
			cgtggcgccg				7200
			actgatggcg				7260
			catcgtccac				7320
			aggcaccttc				7380
			gcgcctcgaa				7440
			ccgccccggc				7500
			cacggtcctc				7560
			gctcttcccg				7620
			ggtatgcggg				7680
			ggggaagatg				7740
			gggcggtgtc				7800
			gtccgagccg				7860
			ggccgcggcg				7920
			caacgctccc				7980
			ggtgtgcgca				8040
			gagcgggaat				8100
			cgtgccgggc				8160
			acacgctgct				8220
			tgcgcgcgca				8280
			gacagttcct				8340
			cgtacaccgg				8400
			tgacgtgcga				8460
			gggttgccga				8520
			tcgacgaggc				8580
187			ccggctaccc				8640
188			tcgtcgacaa				8700
189			cggtcgcggt				8760
			tgctgacgac				8820
							8880
			ggcggtcagc gacgccggcg				8940
							9000
			gcccgcgaac				9060
			caccaggtgc				9120
			ggcaccgaac				
			cttcttctcc				9180
			gacgacgagg				9240
			tgcacgccgg				9300
			tcctcctccc				9360
			tcgggaccgg				9420
			cggcgccgac				9480
202	actccggcag	cgacaggagc	gtggccgcct	gctcggccgg	gtagcaccgc	acctcgggca	9540
			cgctcggcgg				9600
204	gtgcgaagtt	cagctccgtg	gcgatctcgc	ggacggactg	cgacttcggc	ccccatccga	9660

RAW SEQUENCE LISTING

DATE: 02/25/2003 PATENT APPLICATION: US/09/940,316B TIME: 14:18:49

Input Set : N:\jumbos\09940316BDC.txt Output Set: N:\CRF4\02252003\I940316B.raw

205	tgcgggccag	cacgaagtac	tccgccacac	cgaggcgttc	cagacgctcc	cacgcgaggt	9720
206	cgtggtcgtt	cttgctcgcc	accgcctgga	ggatgccgcg	gtcgtcgagc	gtggtgatca	9780
207	cctcgcggat	ctcgtcggtg	aggaccacct	cgtcgtcctc	cagcacggtg	ccccgccaca	9840
208	aggtgttgtc	caggtcccag	accagacact	tgacaatggt	catggctgtc	ctctcaagcc	9900
209	gggagcgcca	gcgcgtgctg	ggccagcatc	acccggcaca	tctcgctgct	gccctcgatg	9960
210	atctccatga	gcttggcgtc	gcggtacgcc	cgttcgacga	cgtgtccctc	tctcgcgcct	10020
			ggcggtcgcg				10080
			gggcaccatc				10140
			cgcgatctgc				10200
214	gcgacgagtt	ggtggtcgcc	gagcggccgg	ccgaactgct	cccgggtccg	ggcgtgggcc	10260
			ccgcaggatc				10320
216	ccgtaggcga	gtgacgccgc	gaccagcatc	ggcagtgacg	cgccggagcc	ggccaggacc	10380
			ctggtccagg				10440
			ctcgacgcgt				10500
			ctggagaccg				10560
220			gccgtcgacg				10620
221			gctgcccgcc				10680
			caggaaggtc				10740
223	acggtccacg	cggccatgcc	ctgcgacgtc	atgacactgc	gcagcgaact	gcagaggctg	10800
			gccgttctcc				10860
			caggccgtcg				10920
			ctcggcggcc				10980
			cccgcagccg				11040
			ggtccgggcc				11100
229	gtacacgacc	agttccatcg	cgaacagcga	cgtgaggccg	ccctccgcga	acaggtcgcg	11160
230	gtccacgggc	cagtccgacc	tggtcttcgt	cttgaggaac	gcgaccaacg	cgtgcgcgac	11220
231	ggggtcgtcc	ttgacgggtg	cggtcatgag	aacaccttct	cgtattcgta	gaagccccgg	11280
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235			cgcggtgccc				11520
236	atcgggtgga	gcagccggct	cgtgacgaag	ccgggcgcgt	cccggacgac	gatcggcttg	11580
237	cgccgcagcg	ccgcgagcag	gtccccggcg	gcggccatgg	ccttctcacc	ggtccggggt	11640
			cgggatcagg				11700
			ggagtcggcc				11760
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			ctcgatcacc				11880
242	gacgtggccg	tccgcagcac	accggggtcg	gcctcggcgg	gcccggccac	gagttgtgcc	11940
			ccgcgcccgc				12000
244	acgagtgtca	ccgggacgcc	gtggcgcagc	gcgagcgtgg	tgatgccggt	gcccatcact	12060
			ctggtggtcc				12120
			acgtcttccg				12180
			ccgagcagca				12240
			ctcaggctgt				12300
249	cgcacagggc	cgccagcgac	gggccgagct	cgcggtccgg	cagttgctgg	tactcgccct	12360
			tggtcgacgc				12420
251	gcagttcggt	cttgcccggc	tcgtcggcgc	cgatggcgtt	cacatgcagg	tgcggcagcc	12480
252	gcggctcggc	gggcagcacc	ggccctttgc	ccgagggcac	cgaggtgacg	gtggacagga	12540
253	catccgcggc	ggcggcggcc	tccgccggat	cggtcacctt	gaccggcagt	ccgaggaacg	12600

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/940,316B

DATE: 02/25/2003 TIME: 14:18:50

Input Set : N:\jumbos\09940316BDC.txt
Output Set: N:\CRF4\02252003\I940316B.raw

L:2519 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1 L:7351 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:28